

## **3.13 Public Services and Utilities**

### **3.13.1 Existing Conditions**

#### **3.13.1.1 Police Services**

The Walla Walla County Sheriff's Department provides police protection to the unincorporated areas of the county, including the communities of Burbank, Wallula, Sun Harbor, and the area surrounding the Wallula Power Project site known as Patrol Area 4 (Walla Walla County 2000). The Sheriff's Department has 1 sheriff, 19 commissioned deputies, 7 reserve deputies, and 3 support staff. The main Sheriff's Department office is located adjacent to the county courthouse at 317 West Main Street in the City of Walla Walla. (White pers. comm.)

The project site is within a regular patrol route although the actual daily patrol frequency to the project vicinity varies. Normal daily Sheriff patrol hours are 9 a.m. to 3 a.m. Sheriff deputies work one of two shifts (day and swing) and are stationed at Burbank Station 54 of Walla Walla County Fire District 5. Two deputies work out of the Burbank station. A planned new reserve program should add two more deputies to the Burbank area.

The Washington State Patrol operates an office in the City of Kennewick that is responsible for patrolling U.S. Highway 12 north of Wallula Junction (the intersection of U.S. Highway 12 and U.S. Highway 730). Normally there is only one Washington State Patrol car on duty in the Wallula area at any given time. The Washington State Patrol works closely with the Walla Walla and Franklin County Sheriff's Departments to manage traffic and accidents along U.S. Highway 12.

The USFWS provides additional law-enforcement assistance within the project vicinity. The USFWS has jurisdiction on federal lands within the McNary National Wildlife Refuge located along U.S. Highway 12 north of the project site.

The current level-of-service ratio for the Walla Walla County Sheriff's Department is one deputy per 2,873 citizens in incorporated and unincorporated areas, or one deputy per 2,097 residents within only the unincorporated areas (Walla Walla County 2000). The Sheriff's Department anticipates a need for two new staff over the next 6 years to maintain the existing service level, and anticipates a considerably larger increase if the existing service level is increased. The Sheriff's Department reported a 23% increase in the number of calls received from 1999 to 2000.

The Umatilla County Sheriff's Department, as well as municipal police departments, provide police service in the project area in Umatilla County. The Umatilla County Sheriff's Department has 13 officers in the county (Umatilla County Sheriff's Department pers. comm.). The City of Umatilla has nine full-time commissioned officers and one part-time officer (Umatilla Police Department pers. comm.). The City of

Hermiston has 12 full-time commissioned officers (Hermiston Police Department pers. comm.). The municipal police departments would provide response capabilities for the proposed project in addition to the Umatilla County Sheriff's Department and the Oregon State Police through a mutual aid agreement.

Benton and Franklin County Sheriff's Departments, municipal police departments, and the Washington State Patrol provide police services to the Tri-Cities area. In total, there are 256 commissioned officers and 75 reserve officers in the two counties (Pacific Northwest National Laboratory 2000).

### **3.13.1.2 Fire Services**

Walla Walla County has four city fire districts (Walla Walla, Prescott, Waitsburg, and College Place) and eight rural fire districts. The project site lies within the boundaries of Walla Walla County Fire Protection District 5. The fire departments in the project vicinity operate under mutual aid agreements that allow equipment and personnel to respond to fires outside of a specific district when a fire becomes too difficult for the local district to control. The districts are generally staffed by volunteers. Fire District 5 is headquartered in the community of Burbank and provides wildland and structural fire suppression, hazardous materials response, and emergency medical services (EMS) to about 92 square miles in western Walla Walla County. Fire District 5 includes fire stations at the following locations.

- Station 52, located 2 miles from the project site, includes the Burbank station and an unstaffed station in the community of Wallula. Equipment includes one engine and one grass truck.
- Station 53, Charboneau Park, is located approximately 20 miles from the project site.
- Station 54, Burbank Heights, is located approximately 7 miles from the project site.

The Burbank fire station (located at 460 West Humorist Road) has a full-time day staff (Monday–Friday, 8 a.m. to 5 p.m.). The staff consists of 5 professional firefighters supported by 27 community volunteer firefighters. The estimated response time (depending on availability of staff and volunteers) to the project site is 8 to 10 minutes from the Burbank station and approximately 5 minutes (after volunteers arrive) from the Wallula station. Table 3.13-1 provides resource information on Fire District 5.

Fire District 5 has mutual aid agreements with Walla Walla County Fire Districts 3 and 6, and with Pasco District 6. The district averages 400 calls per year (one-third fire calls and two-thirds EMS).

Walla Walla County Fire Protection District 6, based in the community of Touchet, has two fire stations housing seven fire fighting vehicles. Fire District 6 is an all-volunteer fire department with 19 firefighters available to respond to calls.

**Table 3.13-1. Resources of Walla Walla County Fire District 5**

Paid Personnel	5
Volunteer Personnel	27
Equipment	4 Engines 5 Grass Trucks 2 Tanker Trucks 1 HazMat Trailer 2 Ambulances 1 Lighting Trailer 1 Heavy Rescue 1 Mass-Casualty Trailer 1 Beall Trailer 1 Utility Van
Source: Yamane pers. comm. as cited in Wallula Generation (2001).	

Pasco Fire Protection District 6 has three fire stations that primarily protect a residential area within the City of Pasco. There are 30 paid professionals on staff. Pasco District 6 has 10 vehicles including 3 fire engines and a Quint (articulating tower truck). Mutual aid from Pasco District 6 to Walla Walla County is limited to two vehicles (including one engine) and deployment is at the discretion of the commanding officer who has the “right of refusal” based on local needs.

Additional Walla Walla County fire departments include

- Fire Protection District 1 which operates two stations in the communities of Clyde and Pleasant View;
- Fire Protection District 2 which operates one fire station in the community of Waitsburg;
- Fire Protection District 4 which operates five fire stations in Walla Walla County and the community of College Place urban growth areas;
- Fire Protection District 7 which operates three fire stations in the communities of Prescott, Lamar and at the corner of Pettyjohn Road and State Highway 125; and
- Fire Protection District 8 which operates one fire station in the community of Dixie.

Other major fire departments in the region that could be available to respond in a catastrophic emergency include the City of Pasco Fire Department, the City of Walla Walla Fire Department, the City of Kennewick Fire Department, the City of Richland Fire Department, the Hanford Fire Department and its Hazardous Materials Response Team, and the Tri-County Hazardous Materials Team, each discussed in more detail below.

The City of Pasco Fire Department has three fire stations that protect a primarily residential area within the Pasco city limits. There are 30 paid professionals on staff. The City of Pasco Fire Department has 10 vehicles including 3 fire engines and a Quint.

The City of Walla Walla Fire Department operates one fire pumper, one combination ladder truck/fire pumper, one command vehicle, and two advanced life support ambulance transport units. The minimum staffing is 11 with no fewer than 3 staff members certified as advanced life support paramedics.

The City of Kennewick Fire Department includes 4 fire stations and 12 vehicles. Twelve professional firefighters are on duty at any given time. All employees of the City of Kennewick Fire Department are trained in both fire suppression and rescue techniques. Suppression services are delivered from four fire stations strategically located throughout the community. Rescue equipment is carried on all department pumpers. Special rescue tools are carried on the grass trucks at Fire Stations 1 and 3. These vehicles carry the “jaws of life” hydraulic tools and air bag lifting devices. The ice rescue suit and equipment are carried on the pumper out of Fire Station 1 during the winter months.

The City of Richland Fire and Emergency Services includes a normal shift staffing of 16 personnel, with a minimum staffing of 12. There are 3 fire stations with 12 vehicles.

The Hanford Fire Department is an industrial fire department that provides emergency response support to the 560-square-mile Hanford Site in southcentral Washington. The Department is a highly trained and professional career industrial fire department with 145 members. It provides emergency fire, medical, hazardous materials, and technical rescue response on a 24-hour-per-day, 7-day-per-week basis. This means that the Department must be qualified to meet the requirements of a municipal fire department as well as the unique specialties of a nuclear/industrial complex such as Hanford. The Department responds to mutual aid requests from 10 surrounding fire districts, including the Cities of Richland, Pasco, and Kennewick Fire Departments; the Benton County Fire Districts 1, 2, 3, 4, 5, and 6; and the Walla Walla Fire District 5.

The Hazardous Materials Response Team personnel of the Hanford Fire Department meet the National Fire Protection Association 471 and 472, Professional Qualifications for Responders to Hazardous Materials Incidents Standards at the Technical Level. Team personnel have also been trained to respond to military chemical and biological hazards incidents. Technical rescue personnel have been trained to perform confined space and low and high angle rope rescues.

The Tri-County Hazardous Materials Team is a regional endeavor of the four area cities (Pasco, Walla Walla, Richland and Kennewick) and surrounding fire protection districts. When a hazardous materials emergency occurs, a department pumper would be initially dispatched to determine the need for the Tri-County Hazardous Materials Team. If the Tri-County Hazardous Materials Team is required, members respond from the different fire departments to the emergency scene to begin operations. The truck carrying equipment and protective suits would provide the Team with the necessary tools to mitigate the emergency until the shipper or owner can hire a private contractor to clean up the spill. All members of the Tri-County Hazardous Materials Team have received extensive training in the control of hazardous materials emergencies.

The Umatilla Rural Fire Protection District serves Umatilla County. The Fire Protection District has an average staff size of 36 people including 1 full-time paid chief and 14 volunteer emergency medical technicians (Umatilla Rural Fire Protection pers. comm.). The Fire District covers approximately 35 square miles and has mutual aid agreements with other fire departments in Umatilla and Morrow Counties as well as the State of Washington.

### **3.13.1.3      *Emergency Medical Services***

The Walla Walla County Emergency Management Office, located in the City of Walla Walla, coordinates medical emergency response calls throughout the county.

Fire District 5, headquartered in the community of Burbank, provides EMS to the project site and the surrounding area. The district operates three ambulances: one based at the community of Burbank Station 51, one based at Station 54, and a third that was to be added in the year 2001. Trained EMS personnel are available during daytime work hours to respond to emergencies from Station 51.

Additional Walla Walla County emergency service providers include

- Fire District 1 which operates two fire stations in the communities of Clyde and Pleasant View;
- Fire District 2 which operates one fire station in the community of Waitsburg;
- Fire District 3 which operates three fire stations in the communities of Eureka, Lee and Vista Hermosa;
- Fire District 4 which operates five fire stations in the Walla Walla and College Place urban growth areas;
- Fire District 6 based in the community of Touchet, which has two fire stations;
- Fire District 7 which operates three fire stations in the communities of Prescott, Lamar and at the corner of Pettyjohn Road and State Highway 125; and
- Fire District 8 which operates one fire station in the community of Dixie.

The City of Walla Walla Fire Department operates ambulance transport services and advanced life support services. Currently, there are 25 paramedics and 19 certified emergency medical technicians (EMTs).

Benton and Franklin Counties' emergency medical service providers include advanced life support (ALS), intermediate life support (ILS), and basic life support (BLS) services as presented in Table 3.13-2.

Two private companies can provide air ambulance service to the project site: Life Flight based in the City of Pasco, and Med-Star based in the community of Moses Lake.

The Lourdes Medical Center is the closest emergency medical facility to the Wallula Power Project site. It is likely that an emergency victim from a project-related accident

would be transported here. Lourdes Medical Center is also the closest full service hospital facility to the project in Walla Walla County. Lourdes Medical Center is located in the City of Pasco, about 20 miles from the project site. Medical services include an emergency room, full surgery capability, an intensive care unit, a rehabilitation unit, maternity services, radiology services, and a pharmacy (Jones pers. comm.).

A small medical clinic is located in Umatilla. The clinic provides X-ray facilities, day surgery, and lab services. It is considering the possibility of expanding to meet growing demand in the area (Benkendorf Associates 1998).

Good Shepard Medical Center, located in Hermiston, serves western Umatilla County. St. Anthony Hospital in Pendleton also serves the area. The Good Shepard Medical Center employs 308 people and has 49 beds. The hospital recently completed an expansion and added surgery facilities (Good Shepard Hospital pers. comm.). The St. Anthony Hospital also has 49 beds and has plans to expand outpatient services (St. Anthony Hospital pers. comm.).

The Tri-Cities area has three hospitals and five minor emergency centers. The hospitals include Kadlec Medical Center, Kennewick General Hospital, and Our Lady of Lourdes Hospital. Kadlec Medical Center in Richland has 124 beds and admitted 6,424 patients in 1999. Kennewick General Hospital has 71 beds and admitted 4,674 patients in 1999. Our Lady of Lourdes, in Pasco, has 132 beds and admitted 4,990 patients in 1999 (Pacific Northwest National Laboratory 2000).

**Table 3.13-2. Benton-Franklin County Medical Services**

<b>Emergency Medical Services</b>	<b>Community Location</b>	<b>Life Support Service</b>
Kennewick Fire Department	Kennewick	ALS and BLS
Richland Fire Department	Richland	ALS and BLS
Benton County Fire Protection District 1	Kennewick	BLS Non-Transport
Benton County Fire Protection District 2	Benton City	BLS and ALS
Benton County Fire Protection District 3	Prosser	BLS
Benton County Fire Protection District 4	West Richland	BLS Non-Transport
Benton County Fire Protection District 6	Paterson	BLS and ALS
American Medical Response	Kennewick	BLS and ALS
Prosser Memorial Hospital	Prosser	ALS and BLS
Tri-Cities Services, Inc., Hanford Fire Department	Richland	ALS and BLS
Energy North West (WPPSS)	Richland	BLS Non-Transport
Pasco Fire Department	Pasco	ALS and BLS
Franklin County Hospital District 1	Eltopia	BLS
Franklin County Hospital District 2	Kahlotus	BLS
Franklin County Hospital District 3	Pasco	BLS Non-Transport
Kadlec Medical Center, ED	Richland	Emergency Department
Kennewick General Hospital	Kennewick	Level 3 Trauma Center
Our Lady of Lourdes Health Center	Pasco	Level 3 Trauma Center
Prosser Memorial Hospital	Prosser	Level 4 Trauma Center

### **3.13.1.4 Schools**

Columbia School District 400 serves a 120-square-mile area that includes the nearby communities of Burbank, Wallula, and Charboneau, and surrounding rural areas. District 400 operates three schools (elementary, middle, and high school) that are located on one campus in the community of Burbank. District 400's annual operating budget for the 2000–2001 school year was \$6.4 million. There were 921 full-time students in District 400 and 55 full-time teaching staff. A breakdown of students by grade is provided in Table 3.13-3.

**Table 3.13-3. Columbia School District Student Population, 2000–2001 School Year**

Grade	Student Population
Kindergarten	62
1st through 3rd	212
4th	74
5th and 6th	138
7th and 8th	141
9th through 12th	294
Total	921
Source: Hawkins pers. comm. as cited in Wallula Generation (2001).	

Touchet School District has a maximum capacity of 400 students and 22 students per classroom (CH2M HILL 2000). Due to class size restrictions, new students moving into the district would displace out-of-district students who would be accommodated in one of the other districts. The schools in College Place and Walla Walla are below maximum capacity. A new elementary school was opened in Walla Walla for the 2001-2002 school year.

The City of Umatilla recently constructed a new high school and middle school to increase student capacity. Hermiston and Stanfield School Districts currently have adequate capacity to accept new students (Benkendorf Associates 1998).

Four colleges provide higher education opportunities within the region surrounding the project site. Two-year degree programs and a variety of independent courses are offered at Walla Walla Community College in the City of Walla Walla, which currently enrolls over 12,000 students (Walla Walla County 2000). Columbia Basin Community College in the City of Pasco also offers 2-year degree programs. Walla Walla College in the City of College Place and Whitman College in the City of Walla Walla are 4-year liberal arts schools with enrollments of approximately 1,700 and 1,300 students, respectively.

Table 3.13-4 provides information on other kindergarten through grade 12 school districts in the project vicinity (Benton, Franklin and Walla Walla Counties).

**Table 3.13-4 School District Student Population, 2000/2001 School Year**

<b>District</b>	<b>Street Address</b>	<b>City/Community</b>	<b>October 2000 Enrollment</b>
Kennewick	524 S Auburn Street	Kennewick	13,629
Richland	615 Snow Avenue	Richland	9,464
Kiona-Benton	1107 Grace	Benton City	1,673
Finley	224606 E Game Farm Road	Kennewick	1,146
Paterson	W Prior Avenue	Paterson	90
Prosser	823 Park Avenue	Prosser	2,808
Wenatchee	235 Sunset Avenue	Wenatchee	7,389
Pasco	1215 W Lewis Street	Pasco	8,850
North Franklin	1100 W Clark Street	Connell	1,939
Star	24180 Pasco Kahlotus Road	Pasco	8
Kahlotus	100 W Martin Street	Kahlotus	95
College Place	1755 S College Avenue	College Place	825
Dixie	U.S. Highway 12 And Biscuit Ridge Road	Dixie	38
Touchet	90 Champion Street	Touchet	319
Waitsburg	605 Main	Waitsburg	395
Walla Walla	364 S Park Street	Walla Walla	6,186
Prescott	207 South A Street	Prescott	271

Source: Washington State Department of Education 2001.

### **3.13.1.5 Communications**

Qwest Corporation (formerly U.S. West) provides local telephone service to the majority of Walla Walla County, including the project area (Walla Walla County 2000).

Telephone lines are located above ground along U.S. Highway 12. Long-distance telephone, cellular telephone, and Internet services are available through several service providers in both the City of Walla Walla and the Tri-Cities area. A local cable television provider serves the cities of Walla Walla and College Place, the community of Burbank, and some other communities, but service is not available in the community of Wallula.

Qwest Communications provides telephone service to Umatilla County. Microwave, fiber optic, and satellite communications are all available within Hermiston, Umatilla, and Pendleton. In addition, several Internet service providers operate within the community. USA Media, TCI Cable, and Charter Communications provide cable television service to Umatilla, Hermiston, and Pendleton (Oregon Economic and Community Development Department 2001).

There are a number of local television and radio stations, and several daily newspapers operating in proximity to the project site.

### **3.13.1.6 Water Supply**

Small water districts supply communities in the project vicinity. Several small water districts serve the community of Burbank area, according to standards established in the



community of Burbank Coordinated Water System Plan (Walla Walla County 2000). Wallula Water District 1 serves the community of Wallula. None of these water districts provides service to the project site, and the applicant does not intend to obtain water for the Wallula Power Project from local utility providers (see Section 3.3, Water Resources). Outside of the water district service areas, water for domestic purposes typically is obtained from individual wells or surface water diversions.

The South Columbia Basin Irrigation District (SCBID) supplies irrigation water to most of the agricultural land in the Burbank area. SCBID took over operation of water diversion and delivery facilities that were constructed by the Bureau of Reclamation as part of the Columbia Basin Project (Walla Walla County 2000). The existing center-pivot system on the project site is currently fed by a SCBID canal that reaches the project site from the north along the property line with the J.R. Simplot Company feedlot.

#### **3.13.1.7 Stormwater**

There are no existing utility systems in the project area that provide stormwater management.

#### **3.13.1.8 Sewage Disposal**

Developments within the project vicinity, including the communities of Burbank and Wallula, use individual on-site septic systems. Major industrial facilities such as the Boise Cascade Corporation Wallula Mill; the J.R. Simplot Company feedlot; the Ponderosa Fibers of Washington deinking plant; and the Iowa Beef Processors slaughterhouse each operate individual on-site wastewater treatment and permitted discharge systems. The Wallula Power Project would use an individual on-site septic system.

The City of Umatilla recently completed construction of a new wastewater treatment facility with a capacity of 1 million gallons per day (mgd). Average use of the plant was estimated to be 0.5 mgd (Stensrud pers. comm.). The Hermiston wastewater treatment plant has a capacity of 2.94 mgd and treats an average of 1.54 mgd. The wastewater treatment plant in Pendleton treats an average of 4 mgd and has a capacity of 12 mgd (Oregon Economic and Community Development Department 2001).

#### **3.13.1.9 Solid Waste**

Basin Disposal Company located in the City of Pasco provides solid waste disposal services to the Wallula area. Basin Disposal Company or a similar company could provide either large metal containers or automated cans (equivalent of three regular garbage cans). Recyclable materials could be deposited in centralized public containers in the City of Pasco or could be dropped off at the Dietrich Road recycling facility. All waste material, construction or otherwise, is normally transported to the Dietrich Road transfer station, where it is compacted and then trucked (within 24 hours) to the Rabanco

Regional Landfill in Roosevelt, Washington, for permanent disposal (Brown pers. comm.).

### **3.13.1.10 Other Governmental Services or Utilities**

Federal, state, and local government agencies provide other governmental services in addition to those discussed above. For example, Walla Walla County provides general local government services such as planning, permitting, tax assessment, and record keeping.

## **3.13.2 Impacts of Proposed Action**

### **3.13.2.1 Construction**

#### ***Generation Plant***

#### ***Police Services***

Impacts of the project on the Sheriff's Department during construction would be low, except for increased traffic and possible traffic accidents along U.S. Highway 12 and U.S. Highway 730. During the 24-month construction period, an increase in traffic would occur on U.S. Highway 12 and U.S. Highway 730 from worker and delivery traffic. The dominant traffic movement would likely occur between the Tri-Cities area to the project site on U.S. Highway 12 and south to Dodd Road where the project site could be entered by an access from the north. Vehicles could also use a new access point between Dodd Road and the Boise Cascade Corporation Wallula Mill, which would provide a safer access route and relieve potential congestion at the current access location during construction. The potential for traffic conflicts would be greater if the project site construction shift changes coincide with shift changes at the Iowa Beef Processors slaughterhouse, the J.R. Simplot Company feedlot, and/or the Boise Cascade Corporation Wallula Mill. There likely would be additional calls for response during the construction phase, primarily because of increased traffic and accident potential, but the increased calls are not anticipated to be sufficient in number to require additional staff resources based in the local area.

Other law enforcement concerns during construction include construction site security against theft and vandalism. The applicant has committed that the Wallula Power Project engineering and procurement contractor (EPC) would assist local law enforcement providers and reduce the potential need for increased police services by providing a self-policing security program. For example, chain-link fences would be installed around construction equipment and trailers; adequate construction lighting of critical areas would be provided; access would be controlled to the project site; and construction security services would be provided. These measures would help to significantly reduce the potential for incidents that would require a response by local law enforcement agencies.

Walla Walla County has a countywide emergency management program. The Sheriff's Department also participates in this program. A new countywide communications system that would link the various fire and emergency response agencies was to be implemented early in 2001. The applicant would develop a comprehensive communication plan to coordinate Sheriff's Department response to emergencies at the project site with the power plant operator and construction contractor.

### *Fire Services*

The risk of a significant fire or explosion during construction of the power plant is considered low. Small quantities of flammable liquids (such as fuels, paints, and cleaning solvents) and compressed gases (acetylene, oxygen, helium, hydrogen, and argon) would be stored and used during construction. The project would rely on both on-site fire protection systems and local fire protection services. The EPC would develop a fire protection and prevention plan to be followed throughout all phases of construction and would provide the fire fighting equipment specified in the plan. Elements of the on-site fire suppression system during construction would consist of portable and fixed fire fighting equipment. Portable fire fighting equipment would consist of fire extinguishers and small hose lines in conformance with Code 850 of the National Fire Protection Association. The EPC's safety representative would conduct periodic fire protection inspections and training exercises. Fire District 5 would conduct routine fire prevention inspections and would be provided information on the types and locations of potential fire hazards. See Section 3.16, Health and Safety, for additional details.

Fire District 5 staff expressed concern over the potential for increased demand on fire and emergency services during project construction (Yamane pers. comm.). The size of the project construction effort and the distance between the project site and the community of Burbank may require additional fire fighting staff to handle fire and/or medical emergencies. For certain types of fires and emergencies, Fire District 5 does not have a technical rescue team. Current Fire District 5 budget levels do not allow for hiring additional staff. Ongoing volunteer fire fighter recruitment in the community would not likely provide sufficient resources to support full-time trained staff during construction. In response to these concerns, the applicant has committed to provide on-site confined-space entry response capability. A response plan would be included in project site safety plans. Plans would include a construction injury and illness prevention plan and a construction on-site fire suppression and prevention plan.

The project site has an existing 1,200 gpm well. The applicant would outfit the well with fire protection connections for use by Fire District 5 during the construction period. One of the early systems to be put into operation would be the water fire protection equipment, including the service water tank and the fire protection pumps.

The applicant would develop a comprehensive communication plan to coordinate Fire District 5 responses to emergencies at the project site with the power plant operator. This comprehensive plan would be part of the fire suppression and prevention plan during construction. The applicant would schedule meetings with Fire District 5 and other

emergency response agencies during the EFSEC review period to determine the initial scope and requirements of the parties for full cooperation of emergency responses. At least 90 days prior to the start of construction, meetings would be scheduled between the EPC, Wallula Power Project personnel, and Fire District 5 to coordinate all final construction response requirements and communication details.

As a result of these commitments from the applicant, the impact of the construction of the Wallula Power Project to fire services is not considered significant.

### *Emergency Medical Services*

During project construction, the local demand for emergency medical services would likely increase slightly due to construction accidents that could occur at the project site or project vicinity. Project construction workers would be exposed to hazards typical of major construction projects. This would require the services of local emergency response units to provide initial treatment and transportation to a local medical facility and the services of emergency rooms in the receiving facility. No medical facilities would be provided at the project site other than first aid medical kits.

Specific accident rates for project construction workers have not been estimated, and the level of demand for EMS response is therefore unknown. The EPC would, however, implement a construction health and safety program that would include an injury and illness prevention plan, a written safety program, and the use of personnel protective devices. Based on these safety provisions and the moderate size of the construction workforce (which would temporarily reach a peak of 549 workers) it is expected that project construction would generate very few serious injury accidents requiring EMS response.

Fire District 5 staff recommended that the applicant have an on-site response capability for confined-space entry situations and other emergencies. The applicant has committed to providing this on-site capability. The response plan would be included in project site safety plans. Plans would include a construction injury and illness prevention plan and a construction on-site fire suppression and prevention plan. Again, with the implementation of these safety provisions, it would not be expected that project construction would generate a large number of serious injury accidents requiring EMS response.

Project construction workers and their families who migrate to the local labor market (Benton, Franklin, and Walla Walla Counties) would generate additional demands on existing local providers for all types of medical services (primary care, hospital, and EMS), as well as various types of social services. Socioeconomic impact analysis for the project indicates that the level of worker and dependent immigration would not be significant (see Section 3.12, Population, Housing, and Economics). Consequently, relocating construction workers and families would not likely create a noticeable increase in demand for medical or social services in any single jurisdiction during project construction.

## *Schools*

The project could indirectly affect educational services within the surrounding area to the extent that project employment opportunities induced workers with student dependents to migrate to the area. Based on the anticipated number of workers needed for project construction and operation and the expected origins of these workers, only the construction phase of the project has the potential to generate a significant number of relocating workers and new residents.

Under normal labor market conditions the vast majority of the project construction workers would be hired from Benton, Franklin, and Walla Walla Counties (primarily from the Tri-Cities labor market), and approximately 50 workers would be expected to migrate into the project area from other locations. Based on typical household size, the maximum immigrant population that would be associated with those relocating workers would be approximately 125 people. Based on the existing age distribution of the area population, about 25% (30 to 35 people) could be expected to be of school age. Immigrating construction workers and dependents would be distributed among the three counties of the study region, with the majority likely locating in the Tri-Cities area. The school-age population of 30 to 35 students would therefore be distributed among several schools and communities rather than concentrated in any one district.

School District 400 has the existing capacity and future plans to absorb enrollment growth associated with families moving into the area for project construction. District 400 could serve an additional 100 to 200 students during the peak construction period, numbers that are three to six times the number of new students projected to require service during the project. While the elementary school is operating at full capacity, the middle school and the high school have sufficient space to accommodate new students. For an increase in elementary school students, the district would shift several elementary classes to available classrooms at the middle school. District 400 has long-term plans to build the first section (four classrooms) of a new elementary school and the balance of the building in phases as the need arises. An alternative short-term option to accommodate increased enrollment would be to reopen a vacant two-room schoolhouse located in the community of Wallula that District 400 has maintained in case of future need. No school district in the area would be likely to experience an enrollment increase that would have a significant impact on staff and equipment needs.

## *Communications*

Construction of the proposed Wallula Power Project would not adversely affect communications service providers. Existing communications systems, specifically telephone and wireless communications, have the capacity to accommodate peak construction demands. Once the power plant is in operation, it would have its own internal communication system. Off-site communications would be accommodated by the existing delivery systems.

### *Water Supply*

Potable water would be trucked onto the project site during the construction period. This potable water would be obtained from either the water district serving the community of Wallula or from a water purveyor in the Tri-Cities area. A well on the project site would be used to supply nonpotable water for construction uses. There would not be significant impacts to water supplies during project construction.

### *Sewage Disposal*

Sanitary wastes from power plant, pipeline lateral, and transmission line construction would be managed through a contract with a local portable toilet waste vendor. The contractor would incorporate applicable state capacity requirements based on the construction worker population on the project site at any given time. Collected wastes would be managed and disposed of by the contracted vendor.

### *Solid Waste*

Solid waste from plant construction would be managed through a service contract with a local waste management firm. This contract would specify the hauling and disposal of waste under the terms of the vendor's permits and licenses and applicable Walla Walla County regulations, primarily as they relate to segregation and disposal of inert and noninert construction wastes.

Nonhazardous solid waste from the plant construction would also be managed through a service contract with a local waste management firm. This contract would specify the hauling and disposal of this waste under the terms of the vendor's permits and licenses and applicable Walla Walla County regulations. During construction, solid waste generation would include scrap construction materials, empty shipping and storage containers, related construction waste items, and trash generated by construction workers. These wastes would be collected and transported off-site to a licensed landfill such the Dietrich Road transfer station where it is compacted and then trucked to the Rabanco Regional Landfill or other such licensed landfills.

Very little hazardous waste would be expected to be generated by project construction. Hazardous wastes generated from these types of facilities are generally limited to spent solvents, parts-cleaning solvents, empty paint cans, empty aerosol cans, spent fluorescent lights and similar hazardous products. The power plant would maintain a satellite accumulation area for these wastes requiring special management and would arrange for the transportation, recycling, and disposal of these materials in accordance with applicable federal, state, and local regulations.

### *Other Governmental Services or Utilities*

Applicant consultations with government agencies have not identified additional governmental services or utilities that would be required to support the project. The project construction contractor would contract for construction power through a local electric utility.

### ***Transmission Line and Associated Facilities***

#### *Police*

Law enforcement concerns during construction of the transmission lines such as construction site security against theft and vandalism should be minimal because Bonneville intends to provide on-site security.

#### *Fire Protection*

The risk of a significant fire during construction of the transmission line is considered low. The greatest risk may occur if construction activities occur during periods of moderate to high wildfire conditions.

#### *Emergency Medical Services*

During transmission line construction, the local demand for emergency medical services would likely increase slightly due to construction accidents that could occur at or near the transmission line corridor. Construction workers would be exposed to hazards typical of major construction projects. If an accident were to occur, local emergency response units would be required to provide initial treatment and transportation to a local medical facility, followed by the need for medical services at emergency rooms in the receiving facility.

Relocating construction workers and families would not likely create a noticeable increase in demand for medical or social services in any single jurisdiction during project construction.

#### *Schools*

The transmission line could indirectly affect educational services within the surrounding area to the extent that employment opportunities induced workers with student dependents to migrate to the area. Based on the estimated number of workers needed for transmission line construction and operation, only the construction phase has the potential to generate a significant number of relocating workers and new residents.

The school-age population of students associated with relocated construction workers would likely be distributed among several schools and communities rather than concentrated in any one school district. Adequate capacity exists to absorb enrollment growth associated with families moving into the area for transmission line construction.

### *Communications*

Construction of the proposed transmission line would not adversely affect communications service providers. Existing communications systems, specifically telephone and wireless communications, have the capacity to accommodate peak construction demands.

### *Water Supply*

Transmission line construction would not depend upon existing water supply systems to meet project operation water needs. There would not be significant impacts to water supply during project construction.

### *Sewage Disposal*

Sanitary wastes from transmission line construction would be managed by means of portable toilet waste systems. They would incorporate applicable capacity requirements based on the construction worker population on-site at any given time. Collected wastes would be managed and disposed of in accordance with state and local requirements.

### *Solid Waste*

Solid waste from construction would be managed through a service contract with a local waste management firm. This contract would specify the hauling and disposal of waste under the terms of the vendor's permits and licenses and applicable Walla Walla County or Umatilla County regulations. A minimal amount of hazardous waste would be generated by the project operations.

## **3.13.2.2      *Operations and Maintenance***

### ***Generation Plant and Pipelines***

#### *Police Services*

Project operation is not expected to have any measurable effect on local long-term demands for law enforcement services. The operating workforce is anticipated to be approximately 32, which, along with occasional deliveries, would have a minimal effect on traffic safety in the project vicinity. The project would not have any unusual



characteristics that would require special or additional law enforcement. On-site security measures would be incorporated into the project facility and operation plans. Consequently, there would be no need for additional staff and equipment resources to maintain local law enforcement service levels.

### *Fire Services*

Project operation would require the use of natural gas and distillate fuel oil for equipment combustion firing, lubricating oil for equipment operation, transformer oil for transformer operation, and ammonia for emission control. All of these materials and their associated quantities are typical for a gas-fired power plant and are present to varying degrees in many other types of industrial facilities.

According to staff at Fire District 5, fires associated with power plants and natural gas transmission lines require foam fire suppression equipment. District 5 does not currently have the necessary equipment to fight these types of potential fires at the power plant. The fire services unit of the U.S. Department of Energy, Hanford Reservation has the necessary foam fire suppression capability, although fire response time from Hanford is about 1 hour.

Once the power plant is in operation and the property tax assessment for the power plant has been formally added to the Walla Walla County tax rolls, the Wallula Power Project would generate substantial annual property tax revenues and Fire District 5 would receive a share of these revenues. However, because there typically is a 2-year lag between the completion of construction and the actual receipt of property tax revenues from a new facility, there may be an initial period of project operation during which there are no new tax revenues to offset any resources needed to meet increased demand for fire services. As a precondition for use of the project site and as stated in a zoning amendment passed by the Board of Walla Walla County Commissioners dated March 26, 2001, the applicant would enter into an agreement with the county for the prepayment of taxes for mitigation of cost impacts on the county. This includes the cost of additional services needed for fire protection during initial operations.

Walla Walla County has a countywide emergency management program. Fire District 5 participates in this program. A new countywide communications system that will link fire and emergency response agencies was to be put into service early in 2001. The applicant would prepare a comprehensive communications plan to coordinate Fire District 5 responses to project site emergencies with the power plant operator. The plan would be part of the fire prevention plan during operations. Therefore, plant operations would not have a significant long-term impact on local fire services.

### *Emergency Medical Services*

Project operation would have minimal long-term, direct or indirect impacts on local medical and social service providers. The operations workforce for the project would be relatively small and they would not be performing inordinately hazardous job

responsibilities (see Section 3.16, Health and Safety, for a discussion of risks for power plant operations workers). Consequently, the project would generate a negligible demand for EMS and related services in response to on-the-job or traffic accidents. In addition, the local labor market is expected to provide virtually all of the operations workers needed by the project. Therefore, project operation would create minimal or no population increases to the local area, and would generate no measurable increase in demand for medical or social services within local jurisdictions.

### *Schools*

The operations staff for the power plant would be approximately 32 people, almost all hired from the local community. Therefore, there would be no operational impact on local schools.

### *Communications*

Operation of the Wallula Power Project would not adversely affect communications service providers. Existing communications systems, specifically telephone and wireless communications, have the capacity to accommodate peak construction demands. Once the power plant is in operation, it would have its own internal communication system. Off-site communications would be accommodated by the existing delivery systems.

### *Water Supply*

Water rights for the Wallula Power Project would come from three sources: (a) a purchase of the on-site deep well groundwater rights of a maximum flow of 1,200 gpm (limited to 1,800 acre-feet per year) from the Port of Walla Walla; (b) a purchase of and transfer of the water rights as part of the purchase of a portion of the Boise Cascade Corporation fiber farm agricultural land for an instantaneous pumping rate of 9,485 gpm (with an anticipated volume of 5,024 acre-feet per year); and (c) a purchase of and transfer of the water rights as part of the purchase of conservation easements from the J.R. Simplot Company of a maximum instantaneous flow of 3,285 gpm (limited to 1,425 acre-feet per year). See Section 3.3, Water Resources for a detailed description of the Boise Cascade Corporation fiber farm and J.R. Simplot Company water rights transfer.

All Boise Cascade Corporation fiber farm and J.R. Simplot Company water would be pumped from the existing 10 shallow surface wells located on the Boise Cascade Corporation fiber farm.

A detailed discussion of the impacts of the 1,200 gpm withdrawal from the project site and the continued use of the 10 existing Boise Cascade Corporation fiber farm water wells on the community of Wallula water service wells is included in Section 3.3, Water Resources.

### *Sewage/Wastewater Disposal*

Sanitary wastes from plant operation would be treated in an on-site septic system. Solids collected in the septic system would occasionally be pumped out of the collection tank and hauled off-site for disposal by an authorized sanitary waste disposal vendor. Since the project would be self-sufficient in handling its sanitary wastes, there would be no sanitary waste impact on the nearby community of Wallula.

As described in Chapter 2, the Wallula Power Project is being designed as a zero water discharge power plant. Plant cooling wastewater would be directed to an on-site brine concentrator and evaporation ponds and would not be released off-site.

### *Solid Waste*

Solid waste from plant operation would be managed through a service contract with a local waste management firm. This contract would specify the hauling and disposal of this waste under the terms of the vendor's permits and licenses and applicable Walla Walla County regulations, primarily as they relate to segregation and disposal of inert and noninert construction wastes.

Nonhazardous solid waste from the plant operation would also be managed through a service contract with a local waste management firm. This contract would specify the hauling and disposal of this waste under the terms of the vendor's permits and licenses and applicable Walla Walla County regulations. During operation, solid waste generation would include items related to power plant maintenance and trash generated by power plant workers and nonhazardous solid waste products from the treatment of makeup water supply systems. These wastes would be collected and transported off-site to a licensed landfill such as the Dietrich Road transfer station where it is compacted and then trucked to the Rabanco Regional Landfill or other such licensed landfills.

Very little hazardous waste would be expected to be generated by the project operations. The plant is expected to qualify as a small quantity generator of hazardous wastes. The plant would maintain a satellite accumulation area for wastes requiring special management and would arrange for their transportation, recycling, and disposal in accordance with applicable federal, state, and local regulations.

### *Other Governmental Services or Utilities*

Applicant consultations with government agencies have not identified any additional governmental services or utilities required to support the project.

## ***Transmission Line***

### ***Communications***

**Radio Interference (RI).** Radio reception in the AM broadcast band (535 to 1605 kilohertz [kHz]) is most often affected by corona-generated electromagnetic interference (EMI). FM radio reception is rarely affected. Generally, RI can affect only residences very near to transmission lines. The Institute of Electrical and Electronics Engineers (IEEE) Radio Noise Design Guide identifies an acceptable limit of fair-weather RI as expressed in decibels above 1 microvolt per meter (dB $\mu$ V/m) of about 40 dB $\mu$ V/m at 100 feet (30 meters) from the outside conductor. As a general rule, average levels during foul weather (when the conductors are wet) are 16 to 22 dB $\mu$ V/m higher than average fair-weather levels.

Median foul-weather levels would be about 17 dB higher than the fair-weather levels. The predicted L<sub>50</sub> fair-weather level at the edge of the proposed right-of-way with no parallel lines is 46 dB $\mu$ V/m for 540 kV line operation; at 100 feet (30 meters) from the outside conductor, the level is 37 dB $\mu$ V/m. Predictions indicate that fair-weather RI will meet the IEEE 40 dB $\mu$ V/m criterion at distances greater than about 100 feet (30 meters) from the outside conductor of the proposed line in all configurations. Predicted fair-weather L<sub>50</sub> levels are comparable with those for other existing 500 kV lines and lower than that from the existing 500 kV Lower Monumental–McNary line (46 dB $\mu$ V/m at 100 feet [30 meters]).

**Television Interference (TVI).** Corona-caused TVI occurs during foul weather and is generally of concern for transmission lines with voltages of 345 kV or above, and only for conventional receivers within about 600 feet (183 meters) of a line. As is the case for RI, gap sources on distribution and low-voltage transmission lines are the principal observed sources of TVI. The use of modern hardware and construction practices for the proposed line would minimize such sources.

The foul-weather TVI level predicted at 100 feet (30 meters) from the outside conductor of the proposed line and for existing lines is 24 dB $\mu$ V/m for all transmission line configurations but one (where the level would be 26 dB $\mu$ V/m at 100 feet [30 meters] from the outside conductor). This is comparable with TVI levels from other existing BPA 500 kV lines, and lower than that from the existing Lower Monumental–McNary 500 kV line (33 dB $\mu$ V/m at 100 feet [30 meters] from the outside conductor).

There is a potential for interference with television signals at locations very near the proposed line in fringe reception areas. However, several factors reduce the likelihood of occurrence. Corona-generated TVI occurs only in foul weather; consequently, signals will not be interfered with most of the time. Because television antennas are directional, the impact of TVI is related to the location and orientation of the antenna relative to the transmission line. If the antenna were pointed away from the line, then TVI from the line would affect reception much less than if the antenna were pointed toward the line. Since the level of TVI falls off with distance, the potential for interference becomes minimal at

distances greater than several hundred feet from the centerline. Where the proposed line parallels the existing 500 kV line with higher TVI levels, interference issues may have already been addressed and the potential for impacts will be less than where a new line with no parallel lines is built.

Other forms of TVI from transmission lines are signal reflection (ghosting) and signal blocking caused by the relative locations of the transmission structure and the receiving antenna with respect to the incoming television signal. Television systems that operate at higher frequencies, such as satellite receivers, are not affected by corona-generated TVI. Cable television systems are similarly unaffected.

Interference with television reception can be corrected by any of several approaches: improving the receiving antenna system; installing a remote antenna; installing an antenna for TV stations less vulnerable to interference; connecting to an existing cable system; or installing a translator. Bonneville has an active program to identify, investigate, and mitigate legitimate RI and TVI complaints. It is anticipated that any instances of TVI caused by the proposed line could be effectively mitigated.

**Interference with Other Devices.** Corona-generated interference can conceivably cause disruption on other communications bands such as the citizen's (CB) and mobile bands. However, mobile-radio communications are not susceptible to transmission-line interference because they are generally frequency modulated (FM). Similarly, cellular telephones operate at a frequency of about 900 MHz, which is above the frequency where corona-generated interference is prevalent. In the unlikely event that interference occurs with these or other communications, mitigation can be achieved with the same techniques used for television and AM radio interference.

Predicted EMI levels for the proposed 500 kV transmission line are comparable to, or lower, than those that already exist near 500 kV lines and no impacts of corona-generated interference on radio, television, or other reception are anticipated. Furthermore, if interference should occur, there are various methods for correcting it. Bonneville has a program to respond to legitimate complaints.

### **3.13.3 Impacts of Alternatives**

#### **3.13.3.1 *Alternative Tower Height and Longer Span Design***

There are no differences to impacts on public services and utilities under the Bonneville alternative when compared with the proposed action.

#### **3.13.3.2 *Alternative Alignment near McNary Substation***

Impacts on public services and utilities would not differ between the alternative alignment and the proposed action.

#### **3.13.3.3      *No Action Alternative***

Under the No Action Alternative there would be no impacts to public services and utilities.

#### **3.13.4      *Mitigation Measures***

No measures are needed beyond those that are already part of the project description (Appendix A) or described earlier in the impact analysis.

#### **3.13.5      *Significant Unavoidable Adverse Impacts***

No significant unavoidable adverse impacts on public utilities and services are expected.